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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 746,044	12 22 2000	Antonio Gutierrez	2000L003	9049

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EXAMINER

HOWARD, JACQUELINE V

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 04 22 2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/746,044

Applicant(s)

GUTIERREZ ET AL.

Examiner

Jacqueline V. Howard

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4,5</u> | 6) <input type="checkbox"/> Other: |

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Applicant's election without traverse of species of the claimed oligomer wherein "Ar" is a polynuclear carboxylic moiety and lubricating oil compositions containing same and the single disclosed species as exemplified by the oligomer of synthesis Examples B in Paper No. 7 is acknowledged.

Claims 1 to 15 are given an action on the merits only as they related to the elected species.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 to 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lieber (2,315,063) combined with Davis (4,708,809).

Lieber teaches a polyketone condensation polymer for use as a pour point depressant when blended in oils of lubricating viscosity (col. 1, lines 27-33). Patentee teaches one such polymer is prepared from a Friedel-Crafts reaction between adipyl chloride and a naphthyl ketone. See Example 7. The resulting polymer will have chain structures as recited at col. 1 line 42. Patentee teaches the size of the polyketone molecules can be controlled in the chain reaction by the proportion of active reactants and catalyst under any set reaction condition (col. 9 lines 15-18). The reactants are chosen to form keto linkages between cyclic groups and alkyl or alkylene groups. (Col. 9 lines 34-36). Polynuclear carboxylic moieties are specifically taught as

intended cyclic groups (col. 2 line 40). The polymers are blended with lubricating oils along with other conventional additives including dispersants (col. 10 lines 21).

Davis teaches nitrogen containing dispersants which are conventionally used in lubricating oil compositions. These dispersants are the same as those used in the instant invention.

Applicants claim a lubricating oil composition comprising a major amount of an oil of lubricating viscosity, a minor amount of a high molecular weight nitrogen containing dispersant and a polyketone condensation product.

It is the examiner's position that the claimed invention would be prima facie obvious to one of ordinary skill in the art. To prepare a polyketone condensation product as exemplified in synthesis Example B of the instant invention for use as a pour point depressant in lubricating oil compositions would be well within the preview of the skilled artisan. The motivation stems from the express teaching of Lieber that polymers of ketone condensation products which are the same as those of the invention would have the ability to depress pour point when added to lubricating oils. To use it in admixture with a conventional dispersant would be obvious because combining two or more materials disclosed by the prior art for the same purpose to form a third material that is to be use for the same purpose has been held to be a prima facie case of obviousness, see *In re Kerkhoven*, 205 USPQ 1069. It is not unobvious to follow the teachings of the prior art.

Claims 1 to 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hu (3,676,346) combined with Lieber (2,315,063).

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Hu teaches mineral lubricating oil compositions containing sludge dispersing amounts of conventional ashless dispersants and pour point depressant organic compounds. Hu uses sulfurized wax alkylated naphthalene and unsulfurized wax alkylated naphthalene as the pour point depressant.


Lieber has been discussed above.

Applicants claimed lubricating oil composition comprising a polyketone condensation polymer pour point depressant and a nitrogen containing dispersant would be obvious in view of the above cited prior art. It would be obvious to use the pour point depressant of Lieber in the lubricating oil composition of Hu and arrive at the claimed invention because the substitution of functional equivalents would have been within the level of ordinary skill in the art.

The reference cited but not applied further teach pour point depressants for oils of lubricating viscosity.

Any inquiry concerning this communication should be directed to J. V. Howard at telephone number (703) 308-2514.

J. V. Howard/mn
April 2, 2003


J. V. Howard
Patent Examiner
GROUP 1764